

WHAT IS CLAIMED IS:

1. A chemical mechanical polishing slurry comprising polishing grains, ammonium nitrate as an oxidizing agent, 1,2,4-triazole as a polishing promoter for a copper metal film and water in which pH is within a range of 3 to 4.
2. The chemical mechanical polishing slurry as claimed in Claim 1 wherein a concentration of 1,2,4-triazole is within a range of 0.05 to 5 wt%.
3. The chemical mechanical polishing slurry as claimed in Claim 1 wherein a concentration of ammonium nitrate is within a range of 0.1 to 5 wt%.
4. The chemical mechanical polishing slurry as claimed in Claim 1 wherein a weight ratio of 1,2,4-triazole to ammonium nitrate (1,2,4-triazole concentration / ammonium nitrate concentration) is within a range of 0.01 to 5.
5. The chemical mechanical polishing slurry as claimed in Claim 1 wherein the total of an ammonium nitrate and a 1,2,4-triazole concentrations is 5 wt% or less.
6. The chemical mechanical polishing slurry as claimed in Claim 1 comprising a silica as polishing grains wherein a content of the silica is within a range of 0.1 to 10 wt%.

7. The chemical mechanical polishing slurry as claimed in Claim 1 wherein a composition ratio of the slurry is adjusted such that a polishing rate ratio of a tantalum film to a copper film (Cu polishing rate / Ta polishing rate) is 1/3 to 1/1.